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(54) IMAGE PROCESSING METHODDEVICE THEREOF AND STORAGE MEDIUM

(57)Abstract:
PROBLEM TO BE SOLVED: To improve operability by attaching images obtained by operating plural designated edition processing to a print sheet only by selecting the pictures at the time of calling the same layoutand attaching different images by registering the plural designated editing processing as an end batch editing group.
SOLUTION: When layout designation is selected by a layout selection box 33layout information corresponding to the layout designation is read from a memoryand a frame indicating the layout is displayed on a print preview window 31. At instructing of editing processingeach kind of button displayed on an editing processing instruction button display window 34 is instructedso that the editing processing corresponding to the button can be operated to the frame displayed on the printing preview window 31. At the time of operating layout for arranging plural images in one sheetthe images to be edited are selectedand the kind of editings is instructed so that the images to be edited and the editing processing corresponding to the images can be specified.

CLAIMS

[Claim(s)]
[Claim 1]An image processing method pointing to two or more editing processings performed to a pictureregistering said two or more directed editing processings as a mass of edit groupand identifying two or more editing processings performed to a picture by said an edit group's registered specification.
[Claim 2]The image processing method according to claim 1 calling an edit group corresponding to an identifier which added an identifier to said edit groupregistereddisplayed two or more identifiers registered in a listand was chosen from said two or more identifiers displayed in a list.

[Claim 3]The image processing method according to claim 1 registering said two or more directed editing processings as layout information.
[Claim 4]The image processing method according to claim 1 considering said editing processing as rotation of a picture.
[Claim 5]The image processing method according to claim 1 considering said editing processing as expansion of a picture.
[Claim 6]The image processing method according to claim 1 considering said editing processing as reduction of a picture.
[Claim 7]The image processing method according to claim 1 considering said editing processing as change of luminosity of a picture.
[Claim 8]The image processing method according to claim 1 considering said editing processing as change of contrast of a picture.
[Claim 9]The image processing method according to claim 1 considering said editing processing as specification of an aspect ratio of a picture.
[Claim 10]The image processing method according to claim 1 performing said two or more identified editing processings to newly inputted picture information.
[Claim 11]Identify editing processing performed to a pictureand an identifier is matched and registered into said identified editing processingAn image processing method performing in other pictures which call editing processing which is matched and is registered into the specified identifier concerned according to specification of an identifierand are different from said picture.
[Claim 12]The image processing method according to claim 11 controlling a picture which performed the editing processing concerned not to register when registering said editing processing.
[Claim 13]The image processing method according to claim 11 making said picture into a picture read from a scanner.
[Claim 14]The image processing method according to claim 11 making said picture into a picture photoed with a digital camera.
[Claim 15]The image processing method according to claim 11 making said picture into a picture stored in a storage.
[Claim 16]The image processing method according to claim 11 making said picture into a picture read from a film scanner.
[Claim 17]An image processing method pointing to a desired selection condition out of a selection condition of two or more picture information registered beforehandcalling picture information which is in agreement with the conditions concerned out of two or more picture information according to said directed selection conditionand outputting said called picture information.
[Claim 18]The image processing method according to claim 17 making said selection condition into conditions on the basis of the order of storing in said two or more picture information.
[Claim 19]The image processing method according to claim 17 making said selection condition into magnetic information memorized by matching with each of said picture information.
[Claim 20]The image processing method according to claim 17 performing processing corresponding to a name which displayed a name showing said selection condition in a list and was specified out of said name displayed in a list with a name showing two or

more layout information registered beforehand to a picture.
[Claim 21]An image processing device comprising:
A directing means which directs two or more editing processings performed to a picture.
A registration means to register said two or more directed editing processings as a mass of edit group.
An identification device which identifies two or more editing processings performed to a picture by said an edit group's registered specification.

[Claim 22]The image processing device comprising according to claim 21:
A list display means for said registration means to add an identifier to said edit groupto register itand to display two or more identifiers registered in a list.
A calling means which calls an edit group corresponding to an identifier selected from said two or more identifiers displayed in a list.

[Claim 23]The image processing device according to claim 21wherein said registration means registers said two or more directed editing processings as layout information.
[Claim 24]The image processing device according to claim 21 considering said editing processing as rotation of a picture.
[Claim 25]The image processing device according to claim 21 considering said editing processing as expansion of a picture.
[Claim 26]The image processing device according to claim 21 considering said editing processing as reduction of a picture.
[Claim 27]The image processing device according to claim 21 considering said editing processing as change of luminosity of a picture.
[Claim 28]The image processing device according to claim 21 considering said editing processing as change of contrast of a picture.
[Claim 29]The image processing device according to claim 21 considering said editing processing as specification of an aspect ratio of a picture.
[Claim 30]The image processing device according to claim 21 having an editing means which performs two or more editing processings which said identification device identified to newly inputted picture information.
[Claim 31]An image processing device comprising:
An editing processing identification device which identifies editing processing performed to a picture.
A registration means to match and register an identifier into editing processing identified by said editing processing identification device.
An editing means performed in other pictures which call editing processing which is matched and is registered into the specified identifier concerned according to specification of an identifierand are different from said picture.

[Claim 32]The image processing device according to claim 31 controlling a picture which performed the editing processing concerned not to register when said registration means registers said editing processing.
[Claim 33]The image processing device according to claim 31 provided with a scanner which reads said picture.
[Claim 34]The image processing device according to claim 31 making said picture into a

picture photoed with a digital camera.
[Claim 35]The image processing device according to claim 31 provided with a reading means which reads said picture in a storage.
[Claim 36]The image processing device according to claim 31 provided with a film scanner which reads said picture.
[Claim 37]An image processing device comprising:
A directing means which directs a desired selection condition out of a selection condition of two or more picture information registered beforehand.
A picture information calling means which calls picture information which is in agreement with the conditions concerned out of two or more picture information according to a selection condition directed by said directing means.
An output means which outputs picture information called by said picture information calling means.

[Claim 38]The image processing device according to claim 37 making said selection condition into conditions on the basis of the order of storing in said two or more picture information.
[Claim 39]The image processing device according to claim 37 making said selection condition into magnetic information memorized by matching with each of said picture information.
[Claim 40]The image processing device comprising according to claim 37:
A list display control means controlled to display in a list a name with which said selection condition is expressed with a name showing two or more layout information registered beforehand.
A control means controlled to perform processing corresponding to a specified name to a picture out of said name displayed in a list.

[Claim 41]By control program for directing two or more editing processings performed to a picturea control program for registering said two or more directed editing processings as a mass of edit groupand said an edit group's registered specification. A storage in which reading [computer / which memorized a control program for identifying two or more editing processings performed to a picture] is possible.
[Claim 42]A control program for adding and registering an identifier to said edit groupThe storage according to claim 41 which memorized a control program for controlling to display two or more identifiers registered in a listand a control program for calling an edit group corresponding to an identifier selected from said two or more identifiers displayed in a list.
[Claim 43]The storage according to claim 41 memorizing a control program for registering said two or more directed editing processings as layout information.
[Claim 44]The storage according to claim 41 memorizing a control program for performing said two or more identified editing processings to newly inputted picture information.
[Claim 45]A control program for identifying editing processing performed to a pictureA control program for matching and registering an identifier into said identified editing processingA storage in which reading [computer / which memorized a control program for performing in other pictures which call editing processing which is matched and is

registered into the specified identifier concerned according to specification of an identifierand are different from said picture] is possible.
[Claim 46]The storage according to claim 45 when registering said editing processingwherein a picture which performed the editing processing concerned memorizes a control program for controlling not to register.
[Claim 47]A control program for directing a desired selection condition out of a selection condition of two or more picture information registered beforehandA storage in which reading [computer / which memorized a control program for calling picture information which is in agreement with the conditions concerned out of two or more picture information according to said directed selection conditionand a control program for outputting said called picture information] is possible.
[Claim 48]A control program for controlling to display in a list a name with which said selection condition is expressed with a name showing two or more layout information registered beforehandThe storage according to claim 48 memorizing a control program for performing processing corresponding to a specified name to a picture out of said name displayed in a list.

DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]
[Field of the Invention]This invention relates to the image processing methoddeviceand storage which can perform desired editing processing to a picture.
[0002]This invention relates to the image processing methoddeviceand storage for raising the operativity at the time of directing editing processing.
[0003]This invention relates to the image processing methoddeviceand storage which can choose and arrange desired picture information from two or more picture information.
[0004]
[Description of the Prior Art]It pointed to the selected picture conventionallythe performed editing processing was memorized to the picture informationand memory of only editing processing was not completed.
[0005]Conventionallywhen choosing a picture from two or more picturesconditions had to be directed whenever it chose.
[0006]
[Problem(s) to be Solved by the Invention]Howeverthe template currently beforehand prepared in the above-mentioned conventional artfor exampleFor examplewhen desired picturessuch as a picture which the operator photoed to some models of a Christmas card or a New Year's cardare arranged and editing processingssuch as expansionreductionmovementand rotationare moreover carried out to the pictureThe editing processing performed to the picture was memorized to the pictureand when the picture arranged to a template was changed into a different pictureit had to repoint to those editing processings to a new picture again.
[0007]Thereforethe same editing indication operation had to be repeated by picture number of sheetsand had to be performed and it was very trouble to perform the same editing processing to two or more pictures.

[0008]the above -- in the Prior artalso when carrying out repeated use of the same selection condition and choosing a picturethe selection condition had to be inputted at every time and it was very trouble.
[0009]
[Means for Solving the Problem]In order to solve a technical problem of the above-mentioned conventional technologythis invention points to two or more editing processings performed to a pictureregisters said two or more directed editing processings as a mass of edit groupand identifies two or more editing processings performed to a picture by said an edit group's registered specification.
[0010]In order to solve a technical problem of the above-mentioned conventional technologythis invention adds an identifier to said edit group preferablyis registereddisplays two or more identifiers registered in a listand calls an edit group corresponding to an identifier selected from said two or more identifiers displayed in a list.
[0011]In order to solve a technical problem of the above-mentioned conventional technologythis invention registers said two or more directed editing processings as layout information preferably.
[0012]In order to solve a technical problem of the above-mentioned conventional technologythis invention is preferred and said editing processing is considered as rotation of a picture.
[0013]In order to solve a technical problem of the above-mentioned conventional technologythis invention is preferred and said editing processing is considered as expansion of a picture.
[0014]In order to solve a technical problem of the above-mentioned conventional technologythis invention is preferred and said editing processing is considered as reduction of a picture.
[0015]In order to solve a technical problem of the above-mentioned conventional technologythis invention is preferred and said editing processing is considered as change of luminosity of a picture.
[0016]In order to solve a technical problem of the above-mentioned conventional technologythis invention is preferred and said editing processing is considered as change of contrast of a picture.
[0017]In order to solve a technical problem of the above-mentioned conventional technologythis invention is preferred and said editing processing is considered as specification of an aspect ratio of a picture.
[0018]In order to solve a technical problem of the above-mentioned conventional technologythis invention performs said two or more identified editing processings to newly inputted picture information preferably.
[0019]In order to solve a technical problem of the above-mentioned conventional technologythis inventionEditing processing performed to a picture is identifiedan identifier is matched and registered into said identified editing processingand it performs in other pictures which call editing processing which is matched and is registered into the specified identifier concerned according to specification of an identifierand are different from said picture.
[0020]In order to solve a technical problem of the above-mentioned conventional technologywhen this invention registers said editing processing preferablya picture which

performed the editing processing concerned is controlled not to register.
[0021]In order to solve a technical problem of the above-mentioned conventional technologythis invention is preferred and let said picture be the picture read from a scanner.
[0022]In order to solve a technical problem of the above-mentioned conventional technologythis invention is preferred and let said picture be the picture photoed with a digital camera.
[0023]In order to solve a technical problem of the above-mentioned conventional technologythis invention is preferred and let said picture be the picture stored in a storage.
[0024]In order to solve a technical problem of the above-mentioned conventional technologythis invention is preferred and let said picture be the picture read from a film scanner.
[0025]In order to solve a technical problem of the above-mentioned conventional technologythis invention points to a desired selection condition out of a selection condition of two or more picture information registered beforehandcalls picture information which is in agreement with the conditions concerned out of two or more picture information according to said directed selection conditionand outputs said called picture information.
[0026]In order to solve a technical problem of the above-mentioned conventional technologythis invention makes said selection condition preferably conditions on the basis of the order of storing in said two or more picture information.
[0027]In order to solve a technical problem of the above-mentioned conventional technologythis invention is preferred and let said selection condition be the magnetic information memorized by matching with each of said picture information.
[0028]In order to solve a technical problem of the above-mentioned conventional technologywith a name showing two or more layout information registered beforehand preferablythis invention displays a name showing said selection condition in a listand performs processing corresponding to a name specified out of said name displayed in a list to a picture.
[0029]
[Embodiment of the Invention]Drawing 1 is a block diagram showing the composition of the image processing device concerning this invention. It is what functions as an image input means in which the image reader 1 reads the picture of manuscriptssuch as a scanneroptically in drawing 1It may be a possible storage of it being removable to these devicessuch as CD-ROMFDMO besides a scannermemorizing image dataand inputting into this deviceor may be a communication interface for downloading image data from the many terminals connected via a communication line. The picture to read may be a picture read optically and the picture recorded or written down in a recording medium like paperIt may be the digital image which it may be made to input the picture of a filmusing a film scanner as the image reader 1or was photoed with the digital camera etc.
[0030]The image display device 2 is what functions as an image display means which displays the image data inputted from the image reader 1The memory 4 functions including the memory (ROM) 3the memory (RAM) 4the microprocessor 5and the display screen 6 also as a work memory which stores the data which stored the image data inputted with the image reader 1and was produced in the middle of processing. The registration data concerning this invention is also registered into the memory 4. The

control program for performing the flow chart mentioned later may be stored in the memory 3or may be stored in the memory 4. Storages removable to this device (for exampleCD-ROMFDMOetc.) Un-illustrating and when it is connected via a communication line and also downloads a control program from a terminalit stores in the memory 4. According to the control program stored in the memories 3 and 4processing concerning the basis of control of the microprocessor 5 and this invention is performed. CRT and a liquid crystal display realize and the display screen 6 enables it to perform edit of the picture on the screenand registration of various data on the display screen 6 by displaying the screen which performs image data and various editsand the registration picture of data. It enables it to direct the coordinates of the request on the display screen 6 by displaying the cursor 8 on the display screen 6and moving cursor to a desired position.
[0031]The input means 7 functions as a means to input a character code and functionssuch as a keyboardor a means to be a coordinate input means of a mousea tabletetc. and to input various data. Image datagraphic dataa character stringetc. function as an output means which outputs the data created by the display screen 6and the printer 9 is realized by LBPink-jet printeretc. Thereforeit is read by the image reader 1and directions of the kind of edit are inputted by the input means 7editing processing is performed by the microprocessor 5andas for editing processingssuch as movementrotationexpansionreductionetc. to the picture displayed on the display screen 6the picture after edit is outputted from the printer 9.
[0032]Not the thing that restricts all the composition shown in drawing 1 to the device which it had independently as a gestalt which carries out the invention in this application but the image reader 1 and printer 9 grade may be the system connected via the image display device 2and the input means 7 and a network.
[0033]Drawing 4 is a main screen for directing processing concerning this inventionand is displayed as a window on the display screen 6. In this screenthe picture inputted from the image read means 1 is displayedand processing which chooses a desired picture out of that displayed picture is performed. Read start directions of the picture by the image read means 1 are made by directing the reading button 14. although it answers having pointed to the reading button 14 once and one read processing by the image read means 1 is performeda read object tries to read two or more pictures by this one read processingand displays a multiple image **** case on a main screen. Directions of the various buttons displayed on a display screenThe coordinates of the position directed when the position as which the pattern of the button is displayed was directed by the input means 7 (for examplethe click of a mouse button or the tap of the pen on a tablet etc.)It is possible by judging which button was directed by comparing the coordinate information (stored in the memory 4) showing the field which shows the button. This is the same about which screen mentioned later and every button. Of coursethe command equivalent to the various buttons on a screen may be inputted from a keyboard.
[0034]In a main screenthe picture then chosen is printed from the printer 9 according to directions of the print button 15. With the picture chosenit is read from the image read means 1 hereOut of two or more pictures currently displayed as a thumbnail image (reduction image). Selection of the picture is directed by the click of the input means on the thumbnail image 13or the click of the input means on the check box 13 provided every thumbnail image 12It is the picture as which the identifier which makes it identifiable to have been chosen as the check box 13 according to having been chosen is

displayed. It enables it to identify selective images and a non selection picture by displaying a "RE" mark on the check box 13 in the example of drawing 6. Whenever it clicks the selection process of this picture on the thumbnail image 12 or the check box 13it changes selection and non selection by turnsand it stores the state of that picture in the memory 4. The selected picture is displayed on the print image preview window 11. Howeversince only the picture arranged in the paper of one sheet is displayed on the print image preview window 11the picture which carries out a preview display can be changed before and after the picture displayed now by clicking the preview page turning-over button 16. If it arranges with the layout which had the selected picture chosen as a preview page turning-over button sidethere is how many sheets of paper in alland the numerical value which shows the paper of what position of them is displayed on the print image preview window 11 is displayed. In the example of drawing 4the number of papers is four in alland it is shown that the 1st of them is displayed on the print image preview window 11. In the example of drawing 4the preview display of the selected picture is un-illustrating.

[0035]The layout which is in a selective state out of the layout beforehand registered into the memory 4 is displayed on the printing establishment box 10. By the input means 7by directing the downward triangular button of the printing establishment box 10the layout name which can be set as the printing establishment box 10 and which should be displayed is read from the memory 4and it displays as a pull down menu. Drawing 5 is a display illustration figure at that time. Herenine layout names are displayed and the display example in the case of making it selectable is shown. By directing a desired layout name within this pull down menuthe layout information memorized by matching with that name is read from the memory 4and it is set as selective images. Although the print image preview window 11 displays the picture arranged at the paper of one sheetwhen the picture has not been chosen yetit displays the frame showing the layout of the picture according to the layout information corresponding to the layout name currently displayed on the printing establishment box 10 like drawing 4. It is an example which arranges the picture of one sheet in the paper of one sheet in the example of drawing 6. That iswhenever a layout is chosen in the printing establishment box 10the display of the frame in the print image preview window 11 is updated.

[0036]When a picture is chosenthe picture is expressed to the print image preview window 11 as the layout corresponding to the layout name currently displayed on the printing establishment box 10. That isa picture is attached to the position of the frame currently displayed by the picture sheep selective state.

[0037]By moving cursor into the print image preview window 11clicking the button of a mouse on a thumbnail imageand canceling the click of a button thereIt can direct to display the thumbnail image of the position which clicked the button on the print image preview window 11. The print image preview window 11 which displayed the picture with such selected picture selection instructing operation is as being shown in drawing 6.

[0038]There is the method of choosing the layout name which includes the selection condition of a picture with the printing establishment box 10 other than the method of directing choosing to a thumbnail image as a selection method of a picture as mentioned above. Since the layout in which the selection condition of the picture of "the first four tops of a picture" is included was chosen in the printing establishment box 10 in the example of this drawing 6The first four tops are chosen from the thumbnail images 12and

the identifier which also shows a selective state to the check box of each thumbnail image is displayed.
[0039]When the layout which includes the magnetic information of the picture of an "APS panorama" which is displayed on the pull down menu of drawing 5 as a selection condition as a selection method of a picture using the printing establishment box 10 is chosenThere is also the method of choosing the picture which reads each magnetic information of the thumbnail image currently displayedand is in agreement with a selection conditioni.e.the picture photoed by the APS panorama in this case. When reading a picture by the image read means 1magnetic information is both read and is stored in the memory 4.
[0040]Nextthe processing which registers a desired layout so that it can display on the pull down menu of the printing establishment box 10 like drawing 5 as a selection object is explained. The registration processing of this layout is registered into the memory 4 when an operator inputs required information by the input means 7. Drawing 2 is a flow chart which shows the processing at the time of registration of a layout.
[0041]In order to specify the layout to registerby directing the edit button 17 in a main screenan edit display (drawing 7) is displayed and the editing processing which should be performed to a picture on this screen is directed. In the paper selection box 32it is a desired paper size and direction of a paperfor exampleA4 sizeor is B5 sizeor every length and every width are directed. This paper selection box 32 provides the information stored in the memory 4 as a combination pattern of direction of the paper size which can be specified beforehandand a paper with the gestalt of a pull down menuAn operator chooses from the inside the paper size and the direction of a paper which were directed according to directions by the input means 7. If a paper is chosen in the paper selection box 32the frame which expresses direction of the paper size and paper with the printing preview window 31 will be displayed. The editing processing performed to the layout which arranges a pictureand its picture is set up in this paper. The origin of the layout to set up can be obtained by choosing a desired layout in the layout selection box 33 by displaying the frame showing the selected layout on the printing preview window 31. The layout name displayed on the layout selection box 33 is the same as the layout name displayed on the pull down menu of drawing 5and is a layout name stored in the memory 4. Howeverthe layout information set up in this edit display is arrangement and editing processing of a pictureand since the selection condition of a picture is set up on other screens mentioned laterin a layout selection boxthe layout name only showing the selection condition of a picture may be controlled not to display.
[0042]If a layout name is chosen in the layout selection box 33the layout information corresponding to the layout name will be read from the memory 4the frame showing the layout will be displayed on the printing preview window 31and directions of the editing processing to the frame will be started.
[0043]Directions of editing processing by directing the various buttons currently displayed on the editing processing instruction button display window 34 by the input means 7Editing processing corresponding to the button is performed to the frame currently displayed on the printing preview window 31and the kind of the directed edit is stored in the memory 4. At the time of the layout which arranges two or more pictures in the paper of one sheetafter choosing the picture of the object which editsthe editing processing matched with the picture and picture of an editing object can be specified by

directing the kind of edit. When the kind of edit is inputtedthis is identifying the picture which is a selective statematching the kind of edit directed to the arrangement information of the pictureand storing in the memory 4and can be realized. The kind of edit which it is displayed on the editing indication button display window 34 as an instruction buttonand can be chosenThey are specification of the aspect ratio of a picturethe trimming of a designated rangeright 90-degree rotation of a pictureleft 90-degree rotationexpansion of the picture for every predetermined percentreduction of the picture for every predetermined percentimage inversionbrightness adjustmentcontrast adjustmentetc. all the pictures currently displayed on the printing preview window 31 are chosen as an auxiliary command of editing processing directions -- all -- a select command. The image deletion command for eliminating the command which cancels the edit to which it pointed and to returnand the picture to which it pointed in the printing preview window 31 is also displayed on the editing processing instruction button display window 34and is made selectable.

[0044]Although it is good also as environment where various editing processings are performed to the frame showing a picture in this printing preview window 31It is good also as environment where display a picture on the printing preview window 31and editing processing is performed on a more real display screenby choosing the thumbnail image currently displayed in the thumbnail image display window 35 by a method which was explained previously. The thumbnail image 36 displayed on this thumbnail image display window 35 is a picture by which the thumbnail indication was carried out to the main screenwhen the edit button 17 is directed.

[0045]When the detailed setting button 30 is directed after pointing to such editing processinga registration picture (drawing 8) is displayed on the display screen 6and registration instruction of a layout is performed (S1). An operator displays the layout edited and processed on the layout preview display window 43 of a registration picture in a previous edit displayand it enables it to check an operator (S2)The indicating input to the printing establishment list 19the new layout name box 40the magnetic information box 41and the picture attendant information box 42 is received (S3). The magnetic information list displayed on the magnetic information box 41 with the gestalt of a pull down menu is shown in drawing 9. These information is beforehand memorized by the memory 4according to directions of the downward triangular button of the magnetic information box 41is read from the memory 4 and displayed. The magnetic information directed by the input means 7 within this list is chosenand it displays on the magnetic information box 41.

[0046]The picture attendant information list displayed on the picture attendant information box 42 with the gestalt of a pull down menu is shown in drawing 10. These information is beforehand memorized by the memory 4according to directions of the downward triangular button of the picture attendant information box 42is read from the memory 4 and displayed. The picture attendant information directed by the input means 7 within this list is chosenand it displays on the picture attendant information box 42. When picture attendant information shows a selection condition when choosing a picture here and the attendant information of all the pictures is chosenit controls to be displayed as a thumbnail imagenamelyto choosearrange and output all the pictures read by the image read means 1. When the attendant information of the picture in every other one is chosenit is displayed as a thumbnail imagenamelyis every other onei.e.the thing which

choosesarranges and outputs the picture of eyesthe third picturethe fifth pictureand -- mostfrom the picture of eyes most among the pictures read by the image read means 1.
[0047]When the registering button 44 is directedto (S4). The layout which consists of a position which arranges the picture currently displayed on the layout view display window 43 at the timeand editing processingThe print setting information currently displayed on the printing establishment list box 19the size information of the photograph currently displayed on the size box of the photographThe paper selection information currently displayed on the paper selection boxthe number information of the picture currently displayed on the number box of the pictureThe stage information currently displayed on the magnetic information box 41 and the picture attendant information currently displayed on the picture attendant information box 42 are matched with the layout name currently displayed on the new layout name box 40and is memorized in the memory 4 (S5). Even if the layout information registered into the memory 4 is a case where it points to the variety of information of a layout on the preview window which displayed the pictureexcept for the pictureit is considered only as the kind and level (for exampleparameterssuch as expansion and percent of reduction) of edit which were directed. The character string of the request which a layout name functions as an identifier for calling each of above-mentioned informationand is inputted by a keyboardsoftkeyetc. may also be a digit string. When the deletion button 45 is directedeach information stored in the memory 4 whenever it was inputted in the registration picture (drawing 8) is altogether eliminated from the memory 4and it returns to an edit display (drawing 7). Also when a Cancel button is directedafter a registration picture (drawing 8) is displayedit is newly inputtedand the information stored in the memory 4 is eliminated from the memory 4and it returns to an edit display (drawing 7).
[0048]In editing the layout which does not register a new layout but has already been registeredAfter specifying the layout name in an edit display (drawing 7)calling layout information and pointing to edit to the layout information in an edit display and a registration picturelayout information is updated to the newly directed information by directing OK button 46. In this casethe layout name of the layout called previously in the edit display is displayed on the new layout name box 40After calling and displaying layout information to the directed layout name according to directions of OK button 46the information in an indicating input or the memory 4 of the changed item is newly updated to the information newly inputted or changed.
[0049]The processing at the time of the call of the registered layout is explained using the flow chart of drawing 3. In a main screen (drawing 6)when a desired layout name is chosen with the printing establishment box 10The frame which calls the layout information which matches with the layout name and is stored in the memory 4and shows the layout to the printing preview window 11 is displayedand the check of the layout by an operator (S21) is enabled. When the selected layout is a thing also including the selection condition of a picturea picture is chosen according to the selection conditionand when it is that in which the selected layout does not include the selection condition of a picturethe selection operation of a picture is received (S22). If the selection operation of the picture by an operator is made in S23it will progress to S24. In S24the picture selected by S22 or S23 is attached to the printing preview window 11and is displayed. Let the picture displayed on the printing preview window 11 be the picture arranged and edited as the layout called from the memory 4 corresponding to the selected layout name.

Print data are constituted as it was displayed on (S25) and the printing preview window 11when the print button 15 was directedand it prints from the printer 9.
[0050]
[Effect of the Invention]By as mentioned abovethe thing for which the operator itself registers as a template the size and angle of gradient of a pictureand the edit group whokeeps cuttingedits a range****etc. and consists of two or more of those editing indication in image printing application. [a group] when it attaches a picture which calls the same layout and is differentthe picture which performed two or more editing processings to which the operator pointed before can be attached to a print sheet only by choosing a pictureand operativity is markedly alike and improves. Since it becomes unnecessary to direct repetition editing processinga possibility that a failure will happen also becomes low and more exact edit can be performed.
[0051]The date currently recorded in relation to the picturefor example like the magnetic information in an APS filmMagnetic informationsuch as timeexposurea focal distanceand an aspect ratio (aspect ratio) of a pictureWhen registering beforehand two or more selection conditions on the basis of the order of storing of two or more picture information used as a selection object and **(ing) a selection conditionthe operativity of directions of a selection condition improves by carrying out that what is necessary is just to direct a desired selection condition out of two or more of the selection conditions registered.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]
[Drawing 1]The block diagram showing the composition of the image processing device concerning this invention
[Drawing 2]The flow chart of layout registration processing
[Drawing 3]The flow chart of layout call processing
[Drawing 4]The display illustration figure of a main screen
[Drawing 5]A display illustration figure when performing printing establishment in a main screen
[Drawing 6]A display illustration figure when the selection condition of a picture is specified in a main screen
[Drawing 7]The display illustration figure of an edit display
[Drawing 8]The display illustration figure of a registration picture
[Drawing 9]Magnetic information list illustration figure
[Drawing 10]Picture attendant information list illustration figure